

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the present application:

Listing of Claims

- 1) (Currently amended) A sterile transfer device for fluids comprised of a body having a bore formed through at least a portion of its interior, a movable plunger contained within the bore, wherein the body and the plunger are formed of plastic, the body having a first and a second end, the first end containing a face designed to be attached to an upstream component, the plunger having a corresponding first and second end, the plunger having a shape corresponding to that of the bore and being of a diameter less than that of the bore, a port formed on the component selected from the group consisting of the second end of the plunger and a portion of the body downstream of the first end of the body, the port being connected to a downstream component, one or more seals between the plunger and the bore to form a liquid tight seal between various portions of the plunger and the bore, the first end of the plunger when in a closed position being in alignment with the face of the body, which combined, form a steamable surface and a sterile barrier against the environment to the rest of the interior of the body, the plunger and downstream components and a cam slot formed in the body, a cam formed on an outer surface of the plunger and contained within the cam slot and a handle formed on the plunger to move the plunger within the bore from a closed to an open and then back to a closed position.
- 2) (Original) The device of claim 1 wherein the bore is a central bore formed through the entire length of the body.
- 3) (Canceled)
- 4) (Original) The device of claim 1 wherein the device is formed of a plastic selected from the group consisting of polyetherimides(PEI), PEEK, PEK, polysulphones, polyarylsulphones, polyalkoxysulphones, polyethersulphones, polyphenyleneoxide, polyphenylenesulphide and blends thereof.
- 5) (Original) The device of claim 1 wherein the device is formed of polyetherimides(PEI).

- 6) (Canceled)
- 7) (Canceled)
- 8) (Canceled)
- 9) (Canceled)
- 10) (Canceled)
- 11) (Currently amended) A sterile transfer device for fluids comprised of a body having a bore formed through at least a portion of its interior, a movable plunger contained within the bore, the body having a first and a second end, the first end containing a face designed to be attached to an upstream component, the plunger having a corresponding first and second end, the plunger having a shape corresponding to that of the bore and being of a diameter less than that of the bore, a port formed on the component selected from the group consisting of the second end of the plunger and a portion of the body downstream of the first end, the port being connected to a downstream component, the first end of the plunger when in a closed position being in alignment with the face of the body, which combined, form a steamable surface and a sterile barrier against the environment to the rest of the interior of the body, the plunger and downstream components and a cam slot formed in the body, a cam formed on an outer surface of the plunger and contained within the cam slot and a handle formed on the plunger to move the plunger within the bore from a closed to an open and then back to a closed position, wherein at least the first face of the body and the plunger are formed of a material selected from the group consisting of polyetherimides(PEI), PEEK, PEK, polysulphones, polyarylsulphones, polyalkoxysulphones, polyethersulphones, polyphenyleneoxide, polyphenylenesulphide and blends thereof.
- 12) (Canceled)
- 13) (Canceled)
- 14) (Previously presented) The device of claim 1 wherein the first face of the body is in the form of a sanitary flange.
- 15) (Previously presented) The device of claim 11 wherein the first face of the body is in the form of a sanitary flange.
- 16) (Previously presented) A sterile transfer device for fluids comprised of a body having a bore formed through at least a portion of its interior, the bore having a three sections each with a different

diameter, the body having a first and a second end, the first end containing a face designed to be attached to an upstream component, a movable plunger contained within the bore, the plunger having a shape corresponding to that of the bore and being of a diameter less than that of the bore, the plunger having a corresponding first and second end, the second end of the plunger being connected to a downstream component, the first end of the plunger when in a closed position being in alignment with the face of the body, which combined, form a steamable surface and a sterile barrier against the environment to the rest of the interior of the body, the plunger and downstream components, one or more seals between the plunger and the bore to form a liquid tight seal between various portions of the plunger and the bore, and a cam slot formed in the body, a cam formed on an outer surface of the plunger and contained within the cam slot and a handle formed on the plunger to move the plunger within the bore of the body.

- 17) (Previously presented) The device of claim 16 wherein the bore has a first bore section of a first set diameter, a second bore section of a set diameter greater than the first set diameter and a transition section between the first and second sections having a tapering diameter along its length from the first section to the second section which is a progression of the difference in diameters between the first set diameter and the second set diameter.
- 18) (Previously presented) The device of claim 16 wherein the bore has a first bore section of a first set diameter, a second bore section of a set diameter greater than the first set diameter and a transition section between the first and second sections having a tapering diameter along its length from the first section to the second section which is a progression of the difference in diameters between the first set diameter and the second set diameter and the progression is linear.
- 19) (Previously presented) The device of claim 16 wherein the plunger has one or more openings adjacent the first end and a fluid channel connecting the one or more openings to the second end of the plunger.
- 20) (Previously presented) The device of claim 1 further comprising one or more seals are arranged along the outer surface of the plunger to form a liquid tight seal between various portions of the plunger and the bore.
- 21) (Currently amended) A sterile transfer device for fluids comprised of a body having a bore formed through at least a portion of its interior, a movable plunger contained within the bore, wherein the

body and the plunger are formed of plastic, the body having a first and a second end, the first end containing a face designed to be attached to an upstream component wherein the first face of the body is in the form of a sanitary flange, the plunger having a corresponding first and second end, the plunger having a shape corresponding to that of the bore and being of a diameter less than that of the bore, a port formed on the component selected from the group consisting of the second end of the plunger and a portion of the body downstream of the first end of the body, the port being connected to a downstream component, the first end of the plunger when in a closed position being in alignment with the face of the body, which combined, form a steamable surface and a sterile barrier against the environment to the rest of the interior of the body, the plunger and downstream components, one or more seals between the plunger and the bore to form a liquid tight seal between various portions of the plunger and the bore, and a cam slot formed in the body, a cam formed on an outer surface of the plunger and contained within the cam slot and a handle formed on the plunger to move the plunger within the bore from a closed to an open and then back to a closed position.

- 22) (Currently amended) A sterile transfer device for fluids comprised of a body having a bore formed through at least a portion of its interior, a movable plunger contained within the bore, wherein the body and the plunger are formed of plastic, the body having a first and a second end, the first end containing a face designed to be attached to an upstream component wherein the first face of the body is in the form of a sanitary flange, the plunger having a corresponding first and second end, one or more seals arranged along the outer surface of the plunger to form a liquid tight seal between various portions of the plunger and the bore, a port formed on the ~~component—device~~ selected from the group consisting of the second end of the plunger and a portion of the body downstream of the first end of the body, the port being connected to a tube which in turn is connected to a collection bag, the first end of the plunger when in a closed position being in alignment with the face of the body, which combined, form a steamable surface and a sterile barrier against the environment to the rest of the interior of the body, the plunger and downstream components and a cam slot formed in the body, a cam formed on an outer surface of the plunger and contained within the cam slot and a handle formed on the plunger to move the plunger within the bore from a closed to an open and then back to a closed position.

- 23) (Previously presented) The device of claim 22 wherein the port has a barb for attaching the tube to the port.
- 24) (Previously presented) The device of claim 22 wherein the plunger has a shape corresponding to that of the bore and being of a diameter less than that of the bore.
- 25) (New) A device comprising a valve having a face and a body, wherein the face is adapted to attach to an upstream component and includes at least one opening, the body having a bore extending at least part way through the body, a plunger contained at least partially in the bore and fitting within the opening of the face, the plunger having a first portion and a second portion, a port formed on the device selected from the group consisting of the second end of the plunger and a portion of the body downstream of the first end of the body, one or more seals disposed on the plunger between the first portion and the second portion wherein the one or more seals are adapted to sealingly mate with the bore of the body to seal from the environment the bore, wherein the plunger is movable between an open and a closed position, the one or more seals of the plunger engage with and seals the opening of the face when the plunger is within the opening in a closed position and a cam formed on the plunger and a cam slot formed in the body to limit the length of travel of the plunger in the bore when the plunger is moved to its open position by the handle.
- 26) (New) A device for fluid sampling comprising a valve having a face and a body, wherein the face is adapted to attach to an upstream component and includes at least one opening, the body having a bore extending at least part way through the body, a plunger contained at least partially in the bore and fitting within the opening of the face, the plunger having a first portion and a second portion, a port formed on the device selected from the group consisting of the second end of the plunger and a portion of the body downstream of the first end of the body, the port being connected to a tube which in turn is connected to a collection bag, one or more seals disposed on the plunger between the first portion and the second portion wherein the one or more seals are adapted to sealingly mate with the bore of the body to seal from the environment the bore, wherein the plunger is movable between an open and a closed position by a handle that moves the plunger linearly within the bore, the one or more seals of the plunger engage with and seals the opening of the face when the plunger is within the opening in a closed position and a cam formed on the

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plunger and a cam slot formed in the body to limit the length of travel of the plunger in the bore when the plunger is moved to its open position by the handle.